4: West K-5 (1946) 1948 NU34 Tarasco NU34
[P. 57-6]

438 178 [166] An interesting aspect of cottage industries is their ephemeral character. Owing to movement of artisan families from one pueblo to another and changes in markets and fashions, certain crafts disappear in some towns and reappear in others. In the last 160 years 37 Tarascan villages and *ranchos* have lost old crafts or gained new ones; 27 have retained their characteristic trades (table 2).[184] The pottery industry in Santa Fé [323] de la Laguna dates only from the last quarter of the 19th century, and in 1910 hat making was [294] brought into Jarácuaro by a few political refugees from Pichátaro. A large number of Tarascan towns were famed for leathercrafts (saddles and [282] shoes) during the 18th and 19th centuries, but now, owing to changes in transportation and the rise of factory production, local leather products have almost disappeared. Again, the iron craft [325] of San Felipe de los Herreros has practically vanished, for factory-made articles can be obtained more cheaply from surrounding mestizo towns.

---

[184] Insufficient data were at hand to determine possible changes in home industries for 20 towns and ranches.

322 It is first mentioned as an established industry in the report of 1789 (AGN Historia, vol. 73, f. 344), indicating that it had been introduced for some time.

LACQUER WORK

386 Modern lacquerwork in Michoacán is closely
322 associated with wood carved with the adz and lathe. Before the Spanish Conquest various gourds (*Lagenaria*, *Cucurbita*, and *Crescentia*) were lacquered with a varnish made from the insect *axin* (*Coccus axin*) and *chía* (*Salvia* sp.) This industry probably centered in the Balsas and Tepalcatepec Basins (Brand, 1944, p. 60) and was extended into the towns near the southern edge of the Sierra, e. g., Peribán and Uruapan. After the introduction of Spanish adz work during the colonial period, lacquer was applied to wooden *bateas* in Peribán, Zirosto, Zacán, Uruapan, and Pátzcuaro. *Bateas* were painted, but not lacquered, in Cucupao (Quiroga) and Santa Fé de la Laguna. Today few Tarascans practice the art, the famous *bateas* of Uruapan being lacquered by mestizos. Some of the turned vases and bowls of Paracho are finished with tung oil and synthetic lacquer purchased in mestizo markets.

LEATHERCRAFT

282 Probably one of the first native Tarascan crafts stimulated and expanded by the early Spaniards was leatherwork. With the introduction of cattle, Tarascan tanners were able to multiply leather production, which formerly had been based on deerskin, to meet the heavy Spanish demand for saddles, halters, shoes (the famous "*zapatos de baqueta de mechoacán*").[182] Tanning was done with local oak bark, as it is today (AGN Tierras, vol. 83, exped. 13). During the colonial period leather-
282 crafts were centered in the northern Tarascan
438 towns near the pastures and hide supply, and in a few pueblos of the Sierra. The latter included Cherán, Cheranátzicurin, Ocumicho, and Nahuatzen, which was one of the largest tanning centers

---

[182] Fray Toribio de Motolinía's statement of 1540 on the Tarascan leather industry is revealing: "*Han deprendido a curtir cuerambres . . . son buenos zapateros, que hacen zapatos y cerrillas* [slippers], *borzeguíes* [high shoes], *pantuflos, chapinas* [wooden shoes with leather straps] *de mugeres; . . . este oficio comenzó en Michoacán, porque allí se curten los buenos cueros de venados. Hacen todo lo que se menester para una silla ginete basto y fuste, coraza y sobrecoraza . . .*" (Motolinía, 1903, p. 183). According to the Relación de Michoacán (p. 16) "*cotaras de cuero*," or leather sandals, were made for the emperors in pre-Conquest times.

4: West K-5 (1946) 1948 NU34 Tarasco NU34
[P. 69-b]

282 438 in the Tarascan area.[183] By the latter part of the 19th century leathercrafts began to decline, and today within the Tarascan area only Nahuatzen (largely mestizo) continues to tan hides and make saddles and other riding equipment.[184] Some Tarascan towns now boast of one or two *zapateros* who make huaraches of imported leather for local consumption. The principal huarache-making centers are now the surrounding mestizo towns: Cocucho, Zacapu, Tinguindín, Los Reyes, Uruapan, Ario de Rosales.

METALCRAFT

325 **Copper work.**—The Tarascans were probably the foremost metallurgists in pre-Columbian Mexico. They worked gold, silver, and copper. The precious metals were formed into ornaments and disks, which the *caltzontzin* stored on the islands in Lake Pátzcuaro; useful objects, such as axes, *coas*, and spearheads, were made of copper (Relación de Michoacán, pp. 104–109, 122–123). Although definite archeological evi- 325 dence is not yet at hand, it is probable that the 172 Tarascans purified native copper and extracted metal from simple oxide ores by smelting (Hendrichs, 1940, p. 327).[185] From cursory inspection of copper artifacts extant in the Museo Regional Michoacano, Morelia, it appears that Tarascans cast copper objects (axheads) in stone molds. After casting, the axes seem to have been further shaped and possibly hardened by hammering.[186] Accidental, rather than deliberate, alloying with tin and zinc probably occurred.

325 316 172 The Tepalcatepec and Balsas Basins contained the ancient copper mines and metallurgical sites. Hendrichs (1940, 1945–46) has described several probable ancient copper mines sites in both the

[183] AGN Tierras, vol. 83, exped. 12; Zavala and Castillo, 1939–46, vol. 7, pp. 361–362; AGN Historia, vol. 72, ff. 178–179. The present northern Tarascan towns of Ziptajo, Azajo, Cumpanja, Tanjoro, Tirindaro, Naranja, and Turumendo were all producers of shoes and saddles in the latter part of the 18th and in the 19th century.

[184] Beals (1946, p. 44) states that in 1940 one person from Aranza was tanning hides in Charán. The old men of Cocucho remember the manufacture of the black "zapatos de raquetas" in their town during the last century. These were sold throughout the Sierra as well as in surrounding mestizo towns.

[185] The Lámina de Juxtlahuaca, a 16th-century representation of the migration of a people from the Gulf of Mexico into the Tarascan country (where they learned metallurgy) clearly depicts smelting of ore or metal (probably copper) apparently with the aid of charcoal and forced air draft (blowpipes) at the ancient copper center of Jiuatlán (Jiuatlán Viejo), 20 km. south of Uruapan.

[186] Microanalysis of Tarascan copperware has not yet been undertaken. Until the results of such analyses are known, it is impossible to make definite statements as to ancient metallurgical methods. Interestingly, the flange shape of the modern Tarascan steel axhead is identical with that of the copper axes found in archeological sites in the Balsas Basin.